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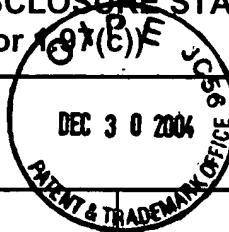
TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT (Under 37 CFR 1.97(b) or 1.97(c))		Docket No. 56029/45752
In Re Application Of: Virgin, Herbert W.		
Serial No. 10/757,832	Filing Date 01/14/2004	Examiner To be assigned
Group Art Unit 1615		
Title: Murine Calicivirus		
<p>Address to: Assistant Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450</p> <p>37 CFR 1.97(b)</p> <p>1. <input checked="" type="checkbox"/> The Information Disclosure Statement submitted herewith is being filed within three months of the filing of a national application other than a continued prosecution application under 37 CFR 1.53(d); within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; before the mailing of a first Office Action on the merits, or before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114.</p> <p>37 CFR 1.97(c)</p> <p>2. <input type="checkbox"/> The Information Disclosure Statement submitted herewith is being filed after the period specified in 37 CFR 1.97(b), provided that the Information Disclosure Statement is filed before the mailing date of a Final Action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an Action that otherwise closes prosecution in the application, and is accompanied by one of:</p> <p><input type="checkbox"/> the statement specified in 37 CFR 1.97(e);</p> <p style="text-align: center;">OR</p> <p><input type="checkbox"/> the fee set forth in 37 CFR 1.17(p).</p>		

TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT
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Docket No.
 56029/45752

In Re Application:

Virgin, Herbert W.



Serial No.	Filing Date	Examiner	Group Art Unit
10/757,832	01/14/2004	To be assigned	1615

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U.S. PATENT DOCUMENTS

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Sheet	2	of	16	Attorney Docket Number	56029/45752

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published		
	01	GLASS, R.I. et al. The Epidemiology of Enteric Caliciviruses from Humans: A Reassessment Using New Diagnostics. The Journal of Infectious Diseases 181 Suppl 2, S254-S261 (2000).		
	02	KAPIKIAN, A.Z. et al. Fields Virology. Fields, B.N. et al. (eds), 783-810 (1996).		
	03	PANG, X.L. et al. Human Calicivirus-Associated Sporadic Gastroenteritis in Finnish Children Less Than Two Years of Age Followed Prospectively During a Rotavirus Vaccine Trial. Pediatr. Infect. Dis. J. 18, 420-426 (1999).		
	04	PANG, X.L. et al. Human Caliciviruses in Acute Gastroenteritis of Young Children in the Community. The Journal of Infectious Diseases 181 Suppl 2, S288-S294 (2000).		
	05	KAPIKIAN, A.Z. et al. Visualization by Immune Electron Microscopy of a 27-nm Particle Associated with Acute Infectious Nonbacterial Gastroenteritis. Journal of Virology 10, 1075-1081 (1972).		
	06	JIANG, X. et al. Norwalk Virus Genome Cloning and Characterization. Science 250, 1580-1583 (1990).		
	07	JIANG, X. et al. Sequence and Genomic Organization of Norwalk Virus. Virology 195, 51-61 (1993).		
	08	HARDY, M.E. et al. Completion of the Norwalk Virus Genome Sequence. Virus Genes 12, 287-290 (1996).		
	09	MAYO, M.A., Virus Taxonomy. Archives of Virology 147, 1071-1076 (2002).		
	10	FANKHAUSER, R.L. et al. Molecular Epidemiology of "Norwalk-like Viruses" in Outbreaks of Gastroenteritis in the United States. The Journal of Infectious Diseases 178, 1571-1578 (1998).		
	11	HEDLUND, K.O. et al. Epidemiology of Calicivirus Infections in Sweden, 1994-1998. The Journal of Infectious Diseases 181 Suppl 2, S275-S280 (2000).		

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OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	12	KOOPMANS, M. et al. Molecular Epidemiology of Human Enteric Caliciviruses in The Netherlands. <i>The Journal of Infectious Diseases</i> 181 Suppl 2, S262-S269 (2000).	
	13	INOUE, S. et al. Surveillance of Viral Gastroenteritis in Japan: Pediatric Cases and Outbreak Incidents. <i>The Journal of Infectious Diseases</i> 181 Suppl 2, S270-S274 (2000).	
	14	TREANOR, J. et al. Principles and Practice of Infectious Diseases. Mandell, G.L. et al. (eds.), 1666-1672 (Churchill Livingston, New York, 1995).	
	15	OKHUYSEN, P.C. et al. Viral Shedding and Fecal IgA Response After Norwalk Virus Infection. <i>The Journal of Infectious Diseases</i> 171, 566-569 (1995).	
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	17	LOPMAN, B.A. et al. Human Caliciviruses in Europe. <i>Journal of Clinical Virology</i> 24, 137-160 (2002).	
	18	CLARKE and LAMBDEN. Viral Zoonoses and Food of Animal Origin: Caliciviruses and Human Disease. <i>Archives of Virology Suppl</i> 13, 141-152 (1997).	
	19	PRINGLE, C.R. Virus Taxonomy – 1999. The Universal System of Virus Taxonomy, Updated to Include the New Proposals Ratified by the International Committee on Taxonomy of Viruses During 1998. <i>Archives of Virology</i> 144, 421-429 (1999).	
	20	GREEN, K.Y. et al. Taxonomy of the Caliciviruses. <i>The Journal of Infectious Diseases</i> 181 Suppl 2, S322-S330 (2000).	
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	22	CLARKE and LAMBDEN. The Molecular Biology of Caliciviruses. <i>Journal of General Virology</i> 78 (Pt 2), 291-301 (1997).	

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	23	ANDO, T. et al. Genetic Classification of "Norwalk-like Viruses". The Journal of Infectious Diseases 181 Suppl 2, S336-S348 (2000).	²
	24	JIANG, X. et al. Characterization of a Novel Human Calicivirus That May Be a Naturally Occurring Recombinant. Archives of Virology 144, 2377-2387 (1999).	
	25	VINJE, J. et al. Genetic Polymorphism Across Regions of the Three Open Reading Frames of "Norwalk-like Viruses". Archives of Virology 145, 223-241 (2000).	
	26	MEYERS, G. et al. Genomic and Subgenomic RNAs of Rabbit Hemorrhagic Disease Virus Are Both Protein-Linked and Packaged into Particles. Virology 184, 677-686 (1991).	
	27	HERBERT, T.P. et al. Identification of a Protein Linked to the Genomic and Subgenomic mRNAs of Feline Calicivirus and Its Role In Translation. Journal of General Virology 78 (Pt 5), 1033-1040 (1997).	
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	31	NEILL, J.D. et al. Nucleotide Sequence and Expression of the Capsid Protein Gene of Feline Calicivirus. Journal of Virology 65, 5440-5447 (1991).	
	32	BOGA, J.A. et al. In Vitro Translation of a Subgenomic mRNA from Purified Virions of the Spanish Field Isolate AST/89 of Rabbit Hemorrhagic Disease Virus (RHDV). Virus Research 26, 33-40 (1992).	
	33	THIEL and KONIG. Caliciviruses: An Overview. Veterinary Microbiology 69, 55-62 (1999).	

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	34	SOSNOVTSEV and GREEN. RNA Transcripts Derived from a Cloned Full-Length Copy of the Feline Calicivirus Genome Do Not Require VpG for Infectivity. <i>Virology</i> 210, 383-390 (1995).		
	35	BURROUGHS and BROWN. Presence of a Covalently Linked Protein on Calicivirus RNA. <i>Journal of General Virology</i> 41, 443-446 (1978).		
	36	VAZQUEZ, A.L. et al. Expression of Enzymatically Active Rabbit Hemorrhagic Disease Virus RNA-Dependent RNA Polymerase in <i>Escherichia coli</i> . <i>Journal of Virology</i> 72, 2999-3004 (1998).		
	37	VAZQUEZ, A.L. et al. Mutation Analysis of the GDD Sequence Motif of a Calicivirus RNA-Dependent RNA Polymerase. <i>Journal of Virology</i> 74, 3888-3891 (2000).		
	38	RACANIELLO, V.R. <i>Fields Virology</i> . Fields, B.N. et al. (eds.), 685-722 (2001).		
	39	CLARKE and LAMBDEN. Polyprotein Processing in Southampton Virus: Identification of 3C-like Protease Cleavage Sites by In Vitro Mutagenesis. <i>Journal of Virology</i> 70, 2605-2610 (1996).		
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	42	SOMEYA, Y. et al. Complete Nucleotide Sequence of the Chiba Virus Genome and Functional Expression of the 3C-like Protease in <i>Escherichia coli</i> . <i>Virology</i> 278, 490-500 (2000).		
	43	SOSNOVTSEV, S.V., et al. Cleavage of the Feline Calicivirus Capsid Precursor Is Mediated by a Virus-Encoded Proteinase. <i>Journal of Virology</i> 72, 3051-3059 (1998).		
	44	SOSNOVTSEVA, S.A. et al. Mapping of the Feline Calicivirus Proteinase Responsible for Autocatalytic Processing of the Nonstructural Polyprotein and Identification of a Stable Proteinase-Polymerase Precursor Protein. <i>Journal of Virology</i> 73, 6626-6633 (1999).		

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	45	ALONSO, J.M.M. et al. Processing of Rabbit Hemorrhagic Disease Virus Polyprotein. <i>Journal of Virology</i> 70, 1261-1265 (1996).			
	46	WIRBLICH, C. et al., Genetic Map of the Calicivirus Rabbit Hemorrhagic Disease Virus as Deduced from In Vitro Translation Studies. <i>Journal of Virology</i> 70, 7974-7983 (1996).			
	47	WIRBLICH, C., et al. 3C-like Protease of Rabbit Hemorrhagic Disease Virus: Identification of Cleavage Sites in the ORF1 Polyprotein and Analysis of Cleavage Specificity. <i>Journal of Virology</i> 69, 7159-7168 (1995).			
	48	JOUBERT, P. et al. Identification of a New Cleavage Site of the 3C-like Protease of Rabbit Haemorrhagic Disease Virus. <i>Journal of General Virology</i> 81, 481-488 (2000).			
	49	MEYERS, G. et al. Rabbit Hemorrhagic Disease Virus: Genome Organization and Polyprotein Processing of a Calicivirus Studied After Transient Expression of cDNA Constructs. <i>Virology</i> 276, 349-363 (2000).			
	50	SOMEYA, Y. et al. Identification of Active-Site Amino Acid Residues in the Chiba Virus 3C-like Protease. <i>Journal of Virology</i> 76, 5949-5958 (2002).			
	51	BONIOTTI, B. et al. Identification and Characterization of a 3C-like Protease from Rabbit Hemorrhagic Disease Virus, A Calicivirus. <i>Journal of Virology</i> 68, 6487-6495 (1994).			
	52	PFISTER and WIMMER. Polypeptide p41 of a Norwalk-like Virus Is a Nucleic Acid-Independent Nucleoside Triphosphatase. <i>Journal of Virology</i> 75, 1611-1619 (2001).			
	53	GLASS, P.J. et al. Norwalk Virus Open Reading Frame 3 Encodes a Minor Structural Protein. <i>Journal of Virology</i> 74, 6581-6591 (2000).			
	54	CAUCHI, M.R. et al. Molecular Characterization of Camberwell Virus and Sequence Variation in ORF3 of Small Round-Structured (Norwalk-like) Viruses. <i>Journal of Medical Virology</i> 49, 70-76 (1996).			
	55	SEAH, E.L. et al. Variation in ORF3 of Genogroup 2 Norwalk-like Viruses. <i>Archives of Virology</i> 144, 1007-1014 (1999).			

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	56	SOSNOVTSEV and GREEN. Identification and Genomic Mapping of the ORF3 and VPg Proteins in Feline Calicivirus Virions. Virology 277, 193-203 (2000).		
	57	NEILL, J.D. Nucleotide Sequence of the Capsid Protein Gene of Two Serotypes of San Miguel Sea Lion Virus: Identification of Conserved and Non-Conserved Amino Acid Sequences Among Calicivirus Capsid Proteins. Virus Research 24, 211-221 (1992).		
	58	ATMAR and ESTES. Diagnosis of Noncultivable Gastroenteritis Viruses, the Human Caliciviruses. Clinical Microbiology Reviews 14, 15-37 (2001).		
	59	FLYNN and SAIF. Serial Propagation of Porcine Enteric Calicivirus-like Virus in Primary Porcine Kidney Cell Cultures. Journal of Clinical Microbiology 26, 206-212 (1988).		
	60	SMITH, A.W. et al. Caliciviruses of Ocean Origin: A Review. Journal of Zoo and Wildlife Medicine 21(1), 3-23 (1990).		
	61	EHRESMANN and SCHAFER. RNA Synthesized in Calicivirus-Infected Cells is Atypical of Picornaviruses. Journal of Virology 22, 572-576 (1977).		
	62	STUDDERT and O'SHEA. Ultrastructural Studies of the Development of Feline Calicivirus in a Feline Embryo Cell Line. Archives of Virology 48, 317-325 (1975).		
	63	LANGLOSS, J.M., et al. In Vitro Interaction of Alveolar Macrophages and Pneumocytes with Feline Respiratory Viruses. Infection and Immunity 20, 836-841 (1978).		
	64	GREEN, K.Y. et al. Expression and Self-Assembly of Recombinant Capsid Protein from the Antigenically Distinct Hawaii Human Calicivirus. Journal of Clinical Microbiology 35, 1909-1914 (1997).		
	65	KREUTZ, L.C. et al. Early Interaction of Feline Calicivirus With Cells in Culture. Archives of Virology 136, 19-34 (1994).		
	66	KREUTZ and SEAL. The Pathway of Feline Calicivirus Entry. Virus Research 35, 63-70 (1995).		

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				Application Number	10/757,832
				Filing Date	01/14/2004
				First Named Inventor	Virgin, Herbert W.
				Group Art Unit	1615
Examiner Name	To be assigned				
Sheet	8	of	16	Attorney Docket Number	56029/45752

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	67	KONIG, M. et al. Detection of Viral Proteins After Infection of Cultured Hepatocytes with Rabbit Hemorrhagic Disease Virus. Journal of Virology 72, 4492-4497 (1998).	
	68	JIANG, X. et al. Baculovirus Expression and Antigenic Characterization of the Capsid Proteins of Three Norwalk-like Viruses. Archives of Virology 147, 119-130 (2002).	
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	70	HARDY, M.E. et al. Specific Proteolytic Cleavage of Recombinant Norwalk Virus Capsid Protein. Journal of Virology 69, 1693-1698 (1995).	
	71	PELOSI, E. et al. The Seroepidemiology of Genogroup 1 and Genogroup 2 Norwalk-like Viruses in Italy. Journal of Medical Virology 58, 93-99 (1999).	
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	78	PRASAD, B.V. et al. X-ray Crystallographic Structure of the Norwalk Virus Capsid. <i>Science</i> 286, 287-290 (1999).			
	79	WHITE, L.J. et al. Attachment and Entry of Recombinant Norwalk Virus Capsids to Cultured Human and Animal Cell Lines. <i>Journal of Virology</i> 70, 6589-6597 (1996).			
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	89	PEDERSEN, N.C. et al. An Isolated Epizootic of Hemorrhagic-like Fever in Cats Caused by a Novel and Highly Virulent Strain of Feline Calicivirus. <i>Veterinary Microbiology</i> 73, 281-300 (2000).			
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	100	BURROUGHS, N. et al. Relationship of San Miguel Sea Lion Virus to Other Members of the Calicivirus Group. <i>Intervirology</i> 10, 51-59 (1978).			
	101	LONG, G.G. et al. Naturally Occurring Picornavirus Infection of Domestic Mink. <i>Canadian Journal of Comparative Medicine</i> 44, 412-417 (1980).			
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	110	DICK, C.P. et al. Sites of Persistence of Feline Calicivirus. <i>Research in Veterinary Science</i> 47, 367-373 (1989).			

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	111	SMITH, A.W. et al. Calicivirus Isolation and Persistence in a Pygmy Chimpanzee (<i>Pan paniscus</i>). <i>Science</i> 221, 79-81 (1983).			T ²
	112	LEVETT, P.N. et al. Longitudinal Study of Molecular Epidemiology of Small Round-Structured Viruses in a Pediatric Population. <i>Journal of Clinical Microbiology</i> 34, 1497-1501 (1996).			
	113	GEISSLER, K. et al. Genetic and Antigenic Heterogeneity Among Feline Calicivirus Isolates from Distinct Disease Manifestations. <i>Virus Research</i> 48, 193-206 (1997).			
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	123	LEW, J.F. et al. Detection of Norwalk Virus or Norwalk-like Virus infections in Finnish Infants and Young Children. <i>The Journal of Infectious Diseases</i> 169, 1364-1367 (1994).	
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	133	BITTLE and RUBIC. Immunization Against Feline Calicivirus Infection. American Journal of Veterinary Research 37, 275-278 (1976).	²
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Sheet	15	of	16	Attorney Docket Number	56029/45752

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Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published			
	144	POLIC, B. et al. Hierarchical and Redundant Lymphocyte Subset Control Precludes Cytomegalovirus Replication During Latent Infection. <i>J. Exp. Med</i> 188, 1047-1054 (1998).			
	145	MILLIGAN, G.N. Neutrophils Aid in Protection of the Vaginal Mucosae of Immune Mice Against Challenge with Herpes Simplex Virus Type 2. <i>Journal of Virology</i> 73, 6380-6386 (1999).			
	146	RADFORD, A.D. et al. Comparison of Serological and Sequence-Based Methods for Typing Feline Calicivirus Isolates from Vaccine Failures. <i>Veterinary Record</i> 146, 117-123 (2000).			
	147	RADFORD, A.D. et al. Molecular Analysis of Isolates of Feline Calicivirus from a Population of Cats in a Rescue Shelter. <i>Veterinary Record</i> 149, 477-481 (2001).			
	148	HARDY, M.E. et al. Antigenic Mapping of the Recombinant Norwalk Virus Capsid Protein Using Monoclonal Antibodies. <i>Virology</i> 217, 252-261, (1996).			
	149	YODA, T. et al. Characterization of Monoclonal Antibodies Generated Against <i>Norwalk Virus GII</i> Capsid Protein Expressed in <i>Escherichia coli</i> . <i>Microbiol. Immunol.</i> 44, 905-914, (2000).			
	150	SMITH, T.J. et al. The Structure of Cucumber Mosaic Virus and Comparison to Cowpea Chlorotic Mottle Virus. <i>Journal of Virology</i> 74, 7578-7586 (2000).			
	151	SMITH, T.J. et al. Neutralizing Antibody to Human Rhinovirus 14 Penetrates the Receptor-Binding Canyon. <i>Nature</i> 383, 350-354 (1996).			
	152	KIM, S. et al. <i>In Vivo</i> Natural Killer Cell Activities Revealed by Natural Killer Cell-Deficient Mice. <i>Proc. Natl. Acad. Sci. U.S.A.</i> 97, 2731-2736 (2000).			
	153	MAZURIER, F. et al. A Novel Immunodeficient Mouse Model—RAG2 x Common Cytokine Receptor Gamma Chain Double Mutants—Requiring Exogenous Cytokine Administration for Human Hematopoietic Stem Cell Engraftment. <i>Journal of Interferon and Cytokine Research</i> 19, 533-541 (1999).			
	154	MACPHERSON, A.J. et al. IgA Production Without mu or delta Chain Expression in Developing B Cells. <i>Nature Immunology</i> 2, 625-631 (2001).			

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				Application Number	10/757,832
				Filing Date	01/14/2004
				First Named Inventor	Virgin, Herbert W.
				Group Art Unit	1615
Examiner Name	To be assigned				
Sheet	16	of	16	Attorney Docket Number	56029/45752

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Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published		
	155	CHAN, O.T. et al. A Novel Mouse with B Cells But Lacking Serum Antibody Reveals an Antibody-Independent Role for B Cells in Murine Lupus. <i>J. Exp. Med.</i> 189, 1639-1647 (1999).		
	156	RAMAKRISHNA, C. et al. Mechanisms of Central Nervous System Viral Persistence: The Critical Role of Antibody and B Cells. <i>The Journal of Immunology</i> 168, 1204-1211 (2002).		
	157	BERGMANN, C.C. et al. Impaired T Cell Immunity in B Cell-Deficient Mice Following Viral Central Nervous System Infection. <i>The Journal of Immunology</i> 167, 1575-1583 (2001).		
	158	Mayo, M.A. A Summary of Taxonomic Changes Recently Approved by ICTV. <i>Archives of Virology</i> 147, 1655-1656 (2002).		
	159	Hutson, A.M. et al. Norwalk Virus Infection and Disease Is Associated with ABO Histo-Blood Group Type. <i>The Journal of Infectious Diseases</i> 185, 1335-1337.		

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